

تأثير اشعاع كاما على بعض الخواص الكهربائية والضوئية لمحلول بولي ستايرين (PS)

:

(CO⁶⁰)

(
(1.12gm/cm³) (1.05 gm/cm³) (CH₂ , CH₂, CH₂, CH₃)
(Free Volume) (23°C)
(Parker, 1982)
(Staudiager)
(Tager, 1978)
(Bonic)
(Hassun, 1989)(Subhi) (PS)
(Al-Bermani, 1997)
(PS)

-: (1% -14%)

$$\% \times \frac{\quad}{\quad} =$$

.(
(3MHz) (Radel kis)
$$C' = \frac{C_s - C_2}{C_1} \dots(1)$$

-: (C₁) (C₂ ,Cs)
$$C_1 = \frac{C_{H_2O} - C_{air}}{C_{H_2O} - 1} \dots(2)$$

(10.28pf) (C_{air}) (82.28 pf) (C_{H₂O})
:
(ε_{H₂O}=80.38)

$$\epsilon_{\max} = \frac{\epsilon - n^2}{2} \quad \dots(3)$$

.() (n)

$$\theta = \tan \frac{\epsilon_{\max}}{\epsilon'} \quad \dots(4)$$

(TWT) (Philips)

($\mu\Omega\text{cm}^{-1}$)

(200-900nm)

(Photospectrometer)

. (Ab birefractometer)

(Bellingham Stanley)

(150rad/min)

(1.7MeV)

(CO⁶⁰)

.(9000 rad

(Longton, 1969)

.(Peter, 1977)

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(1.17Msc)

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%

()

()

(PS)

.()

(Pauling, 1967; Bell, 1997)

(PS)

(C—H)

.(Hassun, 1990)

(Hassun, 1989)

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(gel)

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Al- Bermeni. K, G. *et al.*, J. of Babylon Univ. vol.3, No.3, 1997.

Ana. A. Tager, Physical Chemistry of polymers" English puplishier , Moscow , 2nd., 1978.

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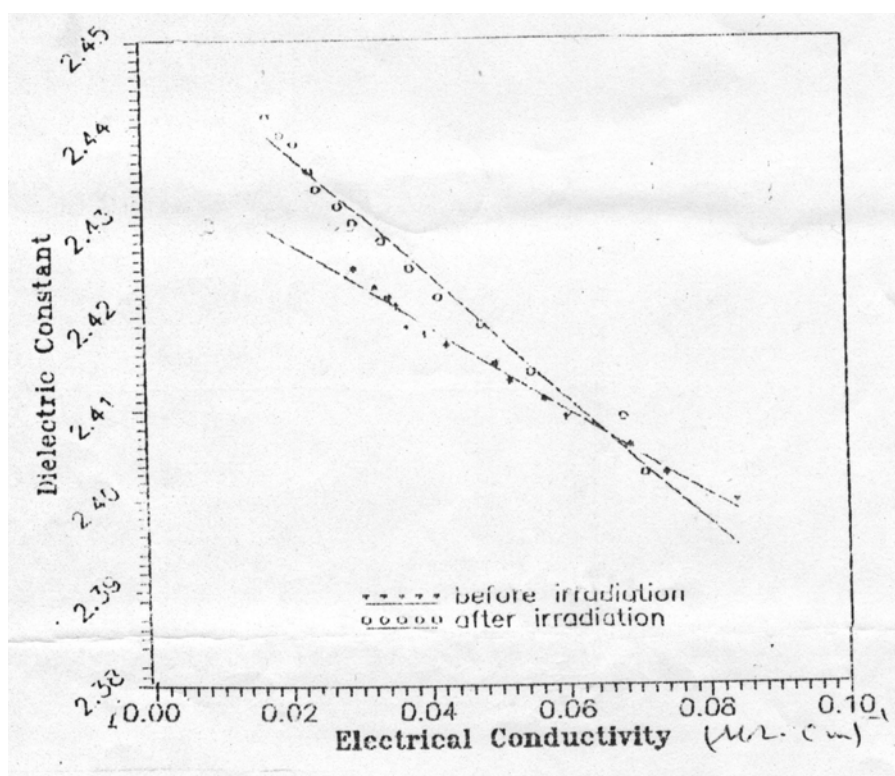
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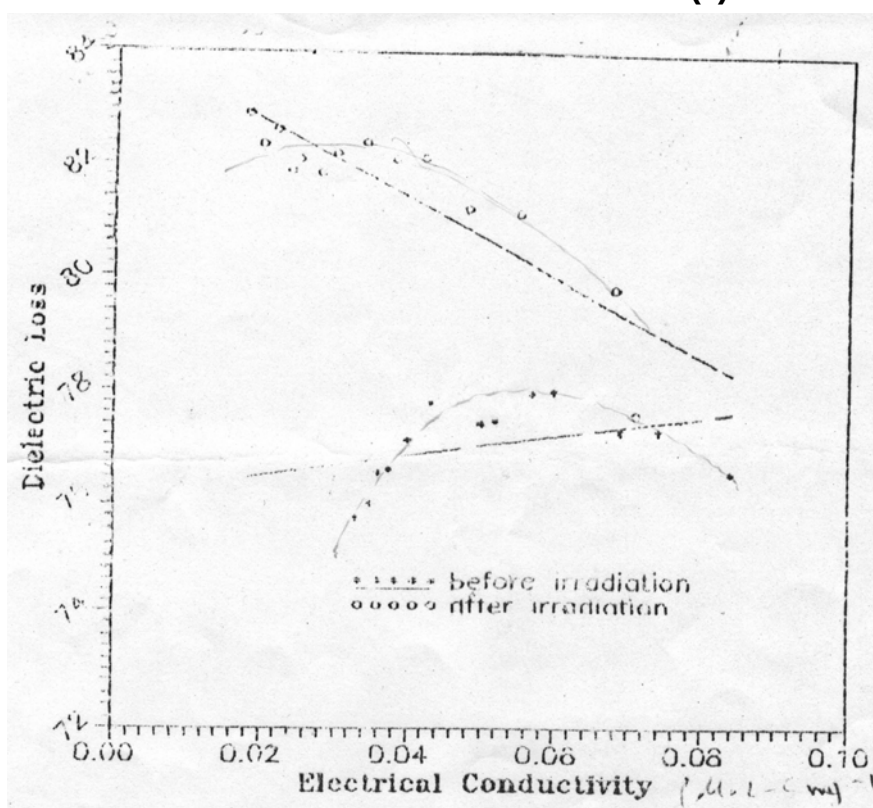
Parker, S.T., (1982). McGraw-Hill Encyclopedia of Chemistry " fifth ed., McGraw-Hill, Inc New York 1982.

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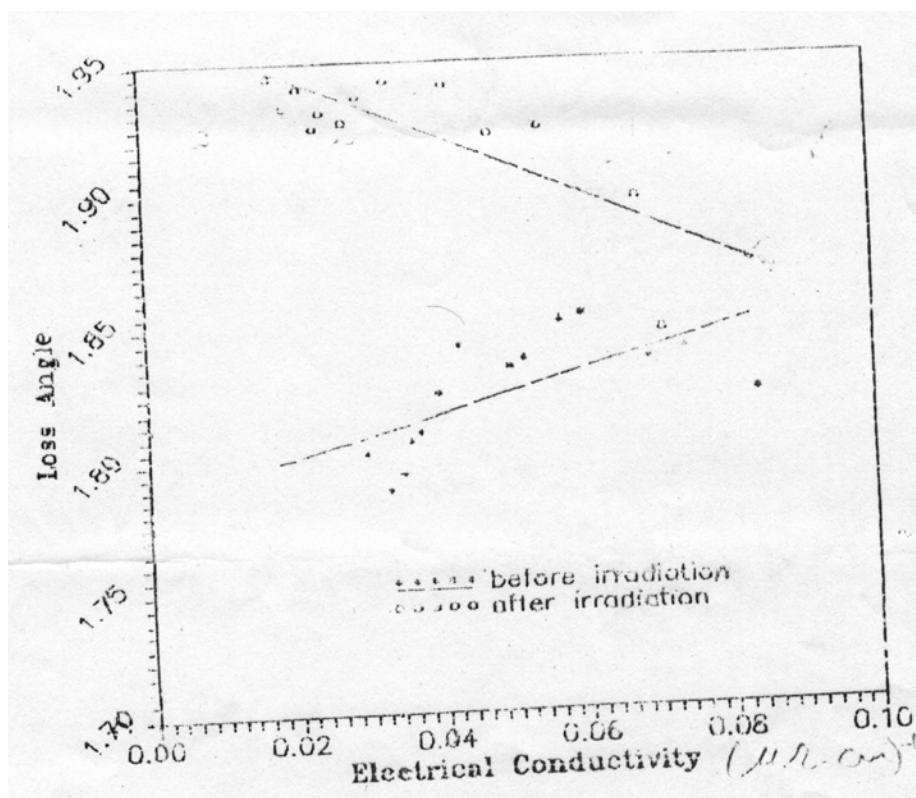
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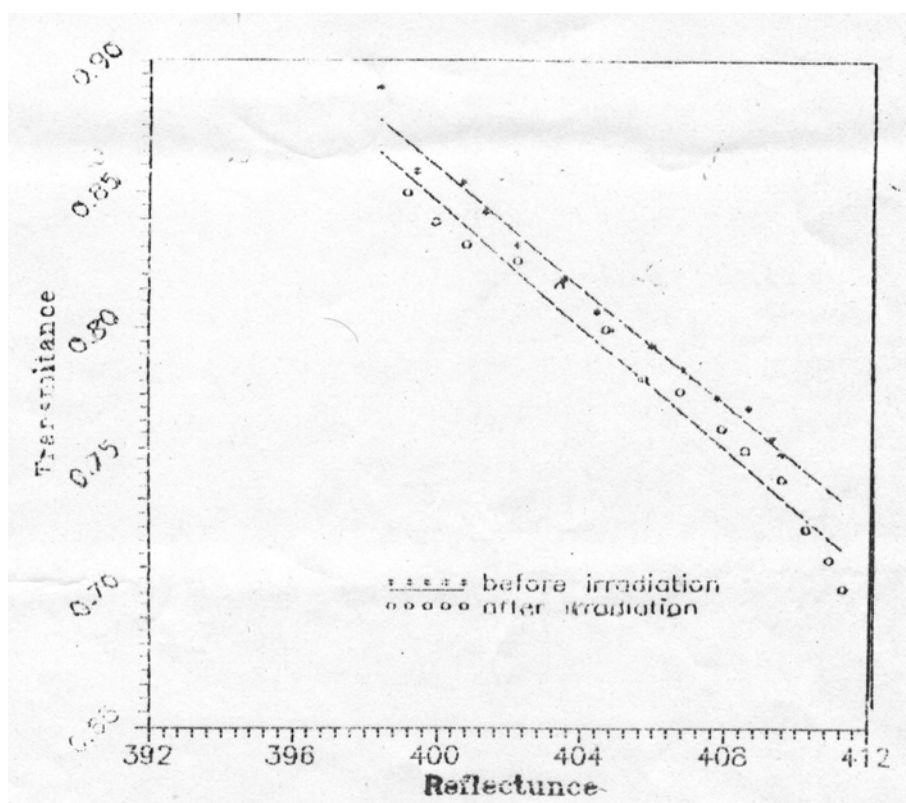
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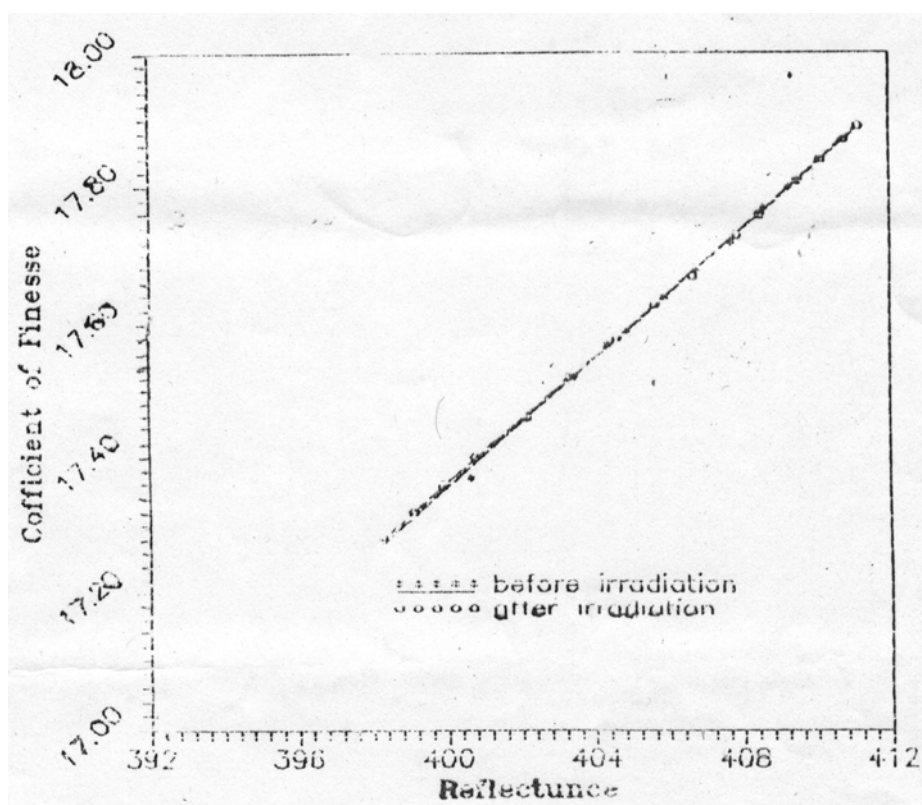
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